

sodium alginate, thiolated sodium hydroxypropylcellulose, thiolated hyaluronic acid, thiolated pectin and derivatives of said thiolated polymers.

102. (New) A polymer as set form in claim 101, wherein said derivatives are selected from the group consisting of derivatives obtained by auto-cross-linking, introduction of functional groups, attachment of complexing agents and coupling of enzyme inhibitors.

103. (New) A polymer as set forth in claim 102, wherein said complexing agent is selected from the group consisting of EDTA.

104. (New) A polymer as set forth in claim 100, wherein said thiol groups are cysteine groups.

105. (New) A polymer as set forth in claim 104, wherein said cysteine groups are bound to said polymer via an amide bond.

106. (New) A polymer as set forth in claim 100, wherein said polymer includes at least one monomer having free thiol groups within said polymer.

107. (New) A polymer as set forth in claim 100, said polymer exhibiting a total work of adhesion (TWA) increased by at least 50% relative to a mucoadhesive polymer not

containing at least one non-terminal thiol group, measured at a pH optimum of the total work of adhesion (TWA) of the thiolated polymer.

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Cont. 108. (New) A polymer as set forth in claim 107, said polymer exhibiting a total work of adhesion (TWA) increased by at least 100% relative to a mucoadhesive polymer not containing at least one non-terminal thiol group, measured at a pH optimum of the total work of adhesion (TWA) of the thiolated polymer.--
